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Remarks

As a preliminary matter, claim 6 in the Response filed 1 December 2009 was designated as "Previously Presented", but should have been "Currently Amended". This was a clerical error with no intent to deceive. In this Response claim 6 is designated as "Previously Amended".

In the Office Action of 2 September 2010, claims 1-24 were pending, with no claims yet allowed. In this Response no claims have been amended. Applicant respectfully requests all outstanding rejections be withdrawn for the reasons below, and further requests that "Final" rejection status of the claims be withdrawn in view of the Office's failure to establish *prima facie* cases of rejection.

I. 35 U.S.C. § 112, ¶1 Rejections

Claims 1-24 were rejected under §112, ¶1, for both written description and enablement issues. In both cases, the recitation of "...actively adjusting the...to less than about 15 ppm"<sup>1</sup> in independent claims 1, 9 and 17, and all claims depending there from, was deemed problematic. All §112 rejections are traversed for the reasons set forth below:

A. Written Description

MPEP § 2163(II)(A) states that there is a strong presumption that an adequate written description of the claimed invention is present in the specification as filed. In other words, a description as filed is presumed to be adequate, unless or until sufficient evidence or reasoning to the contrary has been presented by the Examiner to rebut this presumption (see MPEP § 2163(III)(A)). Thus, it is the Examiner that must set forth express findings of fact supporting the alleged lack of written description. These findings should:

<sup>1</sup> Abridged for brevity. Full recitation is "actively adjusting the reducing environment using at least two adjustments chosen from increasing the distance between the first stage and the second stage, increasing mixing within the first stage by macro-staging, reducing the mass flow, increasing the volumetric utilization, increasing the pressure, increasing the density, increasing the temperature, decreasing the stoichiometric ratio, increasing the local fuel flow, decreasing the local air flow, and decreasing micro-stage mixing, wherein by the adjusting SO<sub>3</sub> is reduced to SO<sub>2</sub> to effectuate an overall decrease in SO<sub>3</sub> concentration to less than about 15 ppm."

(A) Identify the claim limitation at issue; and

(B) Establish a *prima facie* case by providing reasons why a Person Having Ordinary Skill In The Art (a "PHOSITA") at the time the application was filed would not have recognized that the inventor was in possession of the invention as claimed in view of the disclosure of the application as filed. [Emphasis added].

In the present Office Action, the Office has merely provided general allegations that the subject matter of "...actively adjusting the.... to less than about 15 ppm" was not "described in the specification in such a way to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention."<sup>2</sup>. The Examiner, however, has failed to present any evidence or reasoning to rebut the presumption of adequate written description. This lack of evidence or reasoning clearly establishes that the Examiner failed to establish a *prima facie* case by providing reasons why a PHOSITA at the time the application was filed would allegedly not have recognized that the inventor was in possession of the invention as claimed in view of the disclosure of the application as filed. Accordingly, Applicant respectfully submits that the rejection is improper and should be withdrawn.

#### B. Enablement

The Office Action rejected all claims under the first paragraph of 35 U.S.C. § 112 for allegedly failing to comply with the enablement requirement. In particular, the Office alleges that "...actively adjusting the.... to less than about 15 ppm" was not "described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention."<sup>3</sup>. This rejection is respectfully traversed.

Before rejecting a claim as failing to comply with the enablement requirement, the Office must determine whether undue experimentation is needed. To determine whether the necessary experimentation is undue, the Office must at least rely on all eight (8) of the *Wands* factors laid out in MPEP § 2164.01(a). In addition, the Office's analysis must consider all the evidence

<sup>2</sup> See last sentence of first paragraph of page 4 in present Office Action.

<sup>3</sup> See page 4, last sentence, of current Office Action.

related to each of the *Wands* factors, and any conclusion of nonenablement must be based on the evidence as a whole (See MPEP § 2164.01(a)).

In this case, the Office not only failed to consider all of the *Wands* factors, but also failed to consider all the evidence related to each of the *Wands* factors. Instead, the Office merely makes the conclusory statement that the subject matter "...was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention." Not only is undue experimentation not discussed, it is not even mentioned. In short, the Office's general allegations that all claims fail to satisfy the enablement requirement is clearly erroneous, and the rejection should be withdrawn.

## II. 35 U.S.C. §103 Rejections

Applicant specifically addresses the Office's rejections as follows:<sup>4</sup>

### A. Claims 1-24 in view of Salooja, Cahn, admitted prior art, May and Altman

With respect to independent claims 1, 9 and 17, the Office asserts that Salooja discloses "partially combusting...", "actively adjusting..." and "combusting the remainder...". Without addressing the merits of these positions, Applicant respectfully points out that neither Salooja nor the other references, or supposedly admitted prior art, teach the claimed limitation of "*actively adjusting the reducing environment using at least two adjustments chosen from...*" [emphasis added]. As such, *prima facie* evidence of obviousness has not been established.

Based on the patentability of independent claims 1, 9 and 17, all claims depending therefrom, namely claims 2-8, 10-16 and 18-24, are likewise believed patentable.

<sup>4</sup> As used herein, "Salooja" shall be shorthand for U.S. Patent No. 4,375,949; "Cahn" shorthand for U.S. Patent No. 4,029,752; "May" shorthand for U.S. Patent No. 4,196,057; "Altman" shorthand for U.S. Patent No. 5,011,516; "Kindig" shorthand for U.S. Patent No. 4,824,441; and "Carver" shorthand for U.S. Patent No. 4,381,718.

**B. Claims 9-16 in view of Kindig, Carver, and admitted prior art**

With respect to independent claim 9, the Office asserts that Kindig discloses “partially combusting...”, “adjusting the reducing environment...” and “combusting the remainder...”. Without addressing the merits of these positions, Applicant respectfully points out that neither Kindig nor the other references, or the supposedly admitted prior art, teach the claimed limitation of “*actively adjusting the reducing environment using at least two adjustments chosen from...*” [emphasis added]. As such, *prima facie* evidence of obviousness has not been established.

Based on the patentability of independent claim 9, all claims depending therefrom, namely claims 10-16, are likewise believed patentable.

**C. Claims 1-3, 4-8, 9-15, 16, and 17-24 in view of Carver and admitted prior art**

With respect to independent claims 1, 9 and 17, the Office asserts that Carver discloses “partially combusting...”, “actively adjusting...” and “combusting the remainder...”. Without addressing the merits of these positions, Applicant respectfully points out that neither Carver nor the supposedly admitted prior art teach the claimed limitation of “*actively adjusting the reducing environment using at least two adjustments chosen from...*” [emphasis added]. As such, *prima facie* evidence of obviousness has not been established.

Based on the patentability of independent claims 1, 9 and 17, all claims depending therefrom, namely claims 2-8, 10-16 and 18-24, are likewise believed patentable.

**D. Claims 4-7, 12-15, and 20-23 in view of Carver, admitted prior art, and Kindig**

The rejections of dependent claims 4-7, 12-15, and 20-23 are deemed moot in view of the patentability of independent claims 1, 9, and 17, from which the aforementioned claims depend. The non-obviousness of independent claims 1, 9, and 17 is set forth in sections II(A) – (C) above.

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In summary, *prima facie* obviousness has not been established with respect to any of the claims because none of the references or supposedly admitted prior art, either alone or in combination, teach or suggest the claimed limitation of actively adjusting the reducing environment using at least two of the recited methods. Accordingly, withdrawal of the rejections, and allowance on the merits is respectfully requested.

### Conclusion

Applicant respectfully notes that because Applicant has addressed certain comments of the Office does not mean that applicant concedes other comments of the Office. Further, the fact that applicant has made arguments for the patentability of some claims does not mean there are not other good reasons for the patentability of those or other claims.

By these Remarks, applicant submits that he has placed the case in condition for immediate allowance and such action is respectfully requested. If the Office believes that any issue remains unresolved, applicant's attorney would welcome the opportunity for a telephone interview to expedite allowance and issue.

Respectfully submitted,



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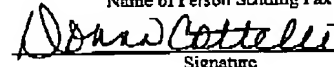
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